FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Eco Services Operations Corp.

AUTHORIZING THE OPERATION OF
Baytown Plant
All Other Basic Inorganic Chemical Manufacturing

LOCATED AT
Harris County, Texas
Latitude 29° 44′ 51″ Longitude 95° 0′ 7″
Regulated Entity Number: RN100211317

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No: O1610 Issuance Date: _____

_____
For the Commission

Table of Contents

General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

Special Terms and Conditions:

Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:

    A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.

    B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

    C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.

    D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.

E. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, § 113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.

F. The permit holder shall comply with the following 30 TAC Chapter 101, Subchapter H, Division 3 (Mass Emission Cap and Trade Program) Requirements:

(i) Title 30 TAC § 101.352 (relating to General Provisions)

(ii) Title 30 TAC § 101.353 (relating to Allocation of Allowances)

(iii) Title 30 TAC § 101.354 (relating to Allowance Deductions)

(iv) Title 30 TAC § 101.356 (relating to Allowance Banking and Trading)

(v) Title 30 TAC § 101.359 (relating to Reporting)

(vi) Title 30 TAC § 101.360 (relating to Level of Activity Certification)

(vii) The terms and conditions by which the emission limits are established to meet or exceed the cap are applicable requirements of this permit

2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):

A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements

B. Title 30 TAC § 101.3 (relating to Circumvention)

C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ

D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ

E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)

F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)

G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)

H. Title 30 TAC § 101.221 (relating to Operational Requirements)

I. Title 30 TAC § 101.222 (relating to Demonstrations)

J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)

3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:

A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity

averaged over a six minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:

(i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(1)(E)

(iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)

(iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:

(1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.

(2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.

(3) Records of all observations shall be maintained.

(4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet

prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

(c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.

C. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).

D. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:

(i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)

(ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)

(iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)

E. Outdoor burning, as stated in 30 TAC § 111.201, shall not be authorized unless the following requirements are satisfied:

(i) Title 30 TAC § 111.205 (relating to Exception for Fire Training)

(ii) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)

4. Permit holder shall comply with the following 30 TAC Chapter 115, Subchapter C requirements:

A. When filling stationary gasoline storage vessels (Stage I) for motor vehicle fuel dispensing facilities, constructed prior to November 15, 1992, with transfers to stationary storage tanks located at a facility which has dispensed no more than 10,000 gallons of gasoline in any calendar month after January 1, 1991, the permit holder shall comply with the following requirements specified in 30 TAC Chapter 115, Subchapter C:

(i) Title 30 TAC § 115.222(3) (relating to Control Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors

(ii) Title 30 TAC § 115.222(6) (relating to Control Requirements)

(iii) Title 30 TAC § 115.224(1) (relating to Inspection Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors

(iv) Title 30 TAC § 115.226(2)(B) (relating to Recordkeeping Requirements)

5. The permit holder shall comply with the following requirements of 30 TAC Chapter 115, Subchapter F, Division 3, Degassing of Storage Tanks, Transport Vessels and Marine Vessels:

A. For degassing of stationary VOC storage tanks, the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 115.541(a) - (c) (relating to Emission Specifications)

(ii) Title 30 TAC § 115.541(f) (relating to Emission Specifications), for floating roof storage tanks

(iii) Title 30 TAC § 115.542(a) and (a)(1), (a)(2), (a)(3) or (a)(4) (relating to Control Requirements). Where the requirements of 30 TAC Chapter 115, Subchapter F contain multiple compliance options, the permit holder shall keep records of when each compliance option was used.

(iv) Title 30 TAC § 115.542(b) - (d), (relating to Control Requirements)

(v) Title 30 TAC § 115.543 (relating to Alternate Control Requirements)

(vi) Title 30 TAC § 115.544(a)(1) and (a)(2) (relating to Inspection, Monitoring, and Testing Requirements), for inspections

(vii) Title 30 TAC § 115.544(b) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring

(viii) Title 30 TAC § 115.544(b)(1) and (b)(2) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring of control devices

(ix) Title 30 TAC § 115.544(b)(2)(A) - (J) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring (as appropriate to the control device)

(x) Title 30 TAC § 115.544(b)(3), (b)(4) and (b)(6) (relating to Inspection, Monitoring, and Testing Requirements), for VOC concentration or lower explosive limit threshold monitoring

(xi) Title 30 TAC § 115.544(c), and (c)(1) - (c)(3) (relating to Inspection, Monitoring, and Testing Requirements), for testing of control devices used to comply with 30 TAC § 115.542(a)(1)

(xii) Title 30 TAC § 115.545(1) - (7), (9) - (11) and (13) (relating to Approved Test Methods)

(xiii) Title 30 TAC § 115.546(a), (a)(1) and (a)(3) (relating to Recordkeeping and Notification Requirements), for recordkeeping

(xiv) Title 30 TAC § 115.546(a)(2) and (a)(2)(A) - (J) (relating to Recordkeeping and Notification Requirements), for recordkeeping (as appropriate to the control device)

(xv) Title 30 TAC § 115.546(a)(4) (relating to Recordkeeping and Notification Requirements), for recordkeeping of testing of control devices used to comply with 30 TAC § 115.542(a)(1)

(xvi) Title 30 TAC § 115.546(b) (relating to Recordkeeping and Notification Requirements), for notification

(xvii) Title 30 TAC § 115.547(4) (relating to Exemptions)

B. For the degassing of all transport vessels with a nominal capacity of 8,000 gallons or more, the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 115.541(a) - (c) and (d) (relating to Emission Specifications)

(ii) Title 30 TAC § 115.542(a) and (a)(1), (a)(2), (a)(3) or (a)(4) (relating to Control Requirements). Where the requirements of 30 TAC Chapter 115, Subchapter F contain multiple compliance options, the permit holder shall keep records of when each compliance option was used.

(iii) Title 30 TAC § 115.542(b), (c) and (e) (relating to Control Requirements)

(iv) Title 30 TAC § 115.543 (relating to Alternate Control Requirements)

(v) Title 30 TAC § 115.544(a)(1) and (a)(2) (relating to Inspection, Monitoring, and Testing Requirements), for inspections

(vi) Title 30 TAC § 115.544(b) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring

(vii) Title 30 TAC § 115.544(b)(1) and (b)(2) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring of control devices

(viii) Title 30 TAC § 115.544(b)(2)(A) - (J) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring (as appropriate to the control device)

(ix) Title 30 TAC § 115.544(b)(3), (b)(4) and (b)(6) (relating to Inspection, Monitoring, and Testing Requirements), for VOC concentration or lower explosive limit threshold monitoring

(x) Title 30 TAC § 115.544(c), and (c)(1) - (c)(3) (relating to Inspection, Monitoring, and Testing Requirements), for testing of control devices used to comply with 30 TAC § 115.542(a)(1)

(xi) Title 30 TAC § 115.545(1) - (11) and (13) (relating to Approved Test Methods)

(xii) Title 30 TAC § 115.546(a), (a)(1) and (a)(3) (relating to Recordkeeping and Notification Requirements), for recordkeeping

(xiii) Title 30 TAC § 115.546(a)(2) and (a)(2)(A) - (J) (relating to Recordkeeping and Notification Requirements), for recordkeeping (as appropriate to the control device)

(xiv) Title 30 TAC § 115.546(a)(4) (relating to Recordkeeping and Notification Requirements), for recordkeeping of testing of control devices used to comply with 30 TAC § 115.542(a)(1)

(xv) Title 30 TAC § 115.546(b) (relating to Recordkeeping and Notification Requirements), for notification

6. The permit holder shall comply with the requirements of 30 TAC § 115.722(b) (relating to Site-wide Cap and Control Requirements) and the requirements of 30 TAC § 115.726(g) (relating to Recordkeeping and Reporting Requirements).

7. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:

A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)

B. Title 40 CFR § 60.8 (relating to Performance Tests)

C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)

D. Title 40 CFR § 60.12 (relating to Circumvention)

E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)

F. Title 40 CFR § 60.14 (relating to Modification)

G. Title 40 CFR § 60.15 (relating to Reconstruction)

H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)

8. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

9. For each gasoline dispensing facility, with a throughput of less than 10,000 gallons per month as specified in 40 CFR Part 63, Subpart CCCCCC, the permit holder shall comply with the following requirements (Title 30 TAC, Subchapter C, § 113.1380 incorporated by reference):

A. Title 40 CFR § 63.11111(e), for records of monthly throughput

B. Title 40 CFR § 63.11111(i), for compliance due to increase of throughput

C. Title 40 CFR § 63.11111(j), for dispensing from fixed tank into portable tank for on-site delivery

D. Title 40 CFR § 63.11113(c), for compliance due to increase of throughput

E. Title 40 CFR § 63.11115(a), for operation of the source

F. Title 40 CFR § 63.11116(a) and (a)(1) - (4), for work practices

G. Title 40 CFR § 63.11116(b), for records availability

H. Title 40 CFR § 63.11116(d), for portable gasoline containers

10. The permit holder shall comply with certified registrations submitted to the TCEQ for purposes of establishing federally enforceable emission limits. A copy of the certified registration shall be maintained with the permit. Records sufficient to demonstrate compliance with the established limits shall be maintained. The certified registration and records demonstrating compliance shall be provided, on request, to representatives of the appropriate TCEQ regional office and any local air pollution control agency having jurisdiction over the site. The permit holder shall submit updated certified registrations when changes at the site require establishment of new emission limits. If changes result in emissions that do not remain below major source thresholds, the permit holder shall submit a revision application to codify the appropriate requirements in the permit.

Additional Monitoring Requirements

11. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached "CAM Summary" upon issuance of the permit. In addition, the permit holder shall comply with the following:

A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).

B. The permit holder shall report, consistent with the averaging time identified in the "CAM Summary," deviations as defined by the deviation limit in the "CAM Summary." Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in 40 CFR § 64.7(c), shall be reported as a deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

C. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time or minimum frequency specified in the "CAM Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).

D. The permit holder shall operate the monitoring, identified in the attached "CAM Summary," in accordance with the provisions of 40 CFR § 64.7.

E. The permit holder shall comply with either of the following requirements for any capture system associated with the VOC control device subject to CAM. If the results of the following inspections indicate that the capture system is not working properly, the permit holder shall promptly take necessary corrective actions:

(i) Once a year the permit holder shall inspect the capture system in compliance of CAM for leaks in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppm above background or as defined by the underlying applicable requirement; or

(ii) Once a month, the permit holder shall conduct a visual, audible, and/or olfactory inspection of the capture system in compliance of CAM to detect leaking components.

F. The permit holder shall comply with the requirements of 40 CFR § 70.6(a)(3)(ii)(A) and 30 TAC § 122.144(1)(A)-(F) for documentation of all required inspections.

12. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time or minimum frequency specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

13. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule (including the permits by rule identified in the PBR Supplemental Tables in the application), standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:

A. Are incorporated by reference into this permit as applicable requirements

B. Shall be located with this operating permit

C. Are not eligible for a permit shield

14. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.

15. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of

operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

Compliance Requirements

16. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.

17. Permit holder shall comply with the following 30 TAC Chapter 117 requirements:

    A. The permit holder shall comply with the compliance schedules and submit written notification to the TCEQ Executive Director as required in 30 TAC Chapter 117, Subchapter H, Division 1:

        (i) For sources in the Houston-Galveston-Brazoria Nonattainment area, 30 TAC § 117.9020:

            (1) Title 30 TAC § 117.9020(2)(A), (C), and (D)

    B. The permit holder shall comply with the Initial Control Plan unit listing requirement in 30 TAC § 117.350(c) and (c)(1).

    C. The permit holder shall comply with the requirements of 30 TAC § 117.354 for Final Control Plan Procedures for Attainment Demonstration Emission Specifications and 30 TAC § 117.356 for Revision of Final Control Plan.

18. Use of Emission Credits to comply with applicable requirements:

    A. Unless otherwise prohibited, the permit holder may use emission credits to comply with the following applicable requirements listed elsewhere in this permit:

        (i) Title 30 TAC Chapter 115

        (ii) Title 30 TAC Chapter 117

        (iii) Offsets for Title 30 TAC Chapter 116

    B. The permit holder shall comply with the following requirements in order to use the emission credits to comply with the applicable requirements:

        (i) The permit holder must notify the TCEQ according to 30 TAC § 101.306(c)-(d)

        (ii) The emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 1

(iii) The executive director has approved the use of the credit according to 30 TAC § 101.306(c)-(d)

(iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.302(g) and 30 TAC Chapter 122

(v) Title 30 TAC § 101.305 (relating to Emission Reductions Achieved Outside the United States)

19. Use of Discrete Emission Credits to comply with the applicable requirements:

A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:

(i) Title 30 TAC Chapter 115

(ii) Title 30 TAC Chapter 117

(iii) If applicable, offsets for Title 30 TAC Chapter 116

(iv) Temporarily exceed state NSR permit allowables

B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:

(i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)

(ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4

(iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)

(iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122

(v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Risk Management Plan

20. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the permit holder shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The permit holder shall submit to the appropriate agency either a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR § 68.10(a), or as part of the compliance certification submitted under this permit, a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of a risk management plan.

Protection of Stratospheric Ozone

21. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone:

    A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.

Permit Location

22. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

23. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Applicable Requirements Summary

Note: A “none” entry may be noted for some emission sources in this permit’s “Applicable Requirements Summary” under the heading of “Monitoring and Testing Requirements” and/or “Recordkeeping Requirements” and/or “Reporting Requirements.” Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
BARGE-DOCK	LOADING/UNLOADING OPERATIONS	N/A	R5211-0001	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure less than 0.5 psia.
BARGE-DOCK	LOADING/UNLOADING OPERATIONS	N/A	R5211-0002	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia., Daily Throughput = Loading less than 20,000 gallons per day.
ENG1	SRIC ENGINES	N/A	R7ICI-0002	30 TAC Chapter 117, Subchapter B	No changing attributes.
ENG1	SRIC ENGINES	N/A	60IIII-0001	40 CFR Part 60, Subpart IIII	No changing attributes.
ENG1	SRIC ENGINES	N/A	63ZZZZ-0001	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GRPACIDTNK	STORAGE TANKS/VESSELS	T-5, T-6, T-7, T-8	R5112-0001	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
PKGBOILSTK	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	R7ICI-0001	30 TAC Chapter 117, Subchapter B	No changing attributes.
PKGBOILSTK	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	60Dc-001	40 CFR Part 60, Subpart Dc	No changing attributes.
PREHTRSTK	PROCESS HEATERS/FURNACES	N/A	R7ICI-0001	30 TAC Chapter 117, Subchapter B	No changing attributes.
PRO-REGEN	SULFURIC ACID PRODUCTION	N/A	REG2-002	30 TAC Chapter 112, Sulfur Compounds	No changing attributes.
PRO-REGEN	SULFURIC ACID PRODUCTION	N/A	60H-001	40 CFR Part 60, Subpart H	No changing attributes.
T-18	STORAGE TANKS/VESSELS	N/A	R5112-0002	30 TAC Chapter 115, Storage of VOCs	Control Device Type = Direct-flame incinerator

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
T-18	STORAGE TANKS/VESSELS	N/A	R5112-0003	30 TAC Chapter 115, Storage of VOCs	Control Device Type = Other vapor destruction unit
T-18	STORAGE TANKS/VESSELS	N/A	R5112-0006	30 TAC Chapter 115, Storage of VOCs	Control Device Type = Carbon adsorber (non-regenerative).
T-18	STORAGE TANKS/VESSELS	N/A	60Kb-001	40 CFR Part 60, Subpart Kb	No changing attributes.
T-18	STORAGE TANKS/VESSELS	N/A	60Kb-002	40 CFR Part 60, Subpart Kb	No changing attributes.
T-18	STORAGE TANKS/VESSELS	N/A	60Kb-003	40 CFR Part 60, Subpart Kb	No changing attributes.
T-19	STORAGE TANKS/VESSELS	N/A	R5112-0002	30 TAC Chapter 115, Storage of VOCs	Control Device Type = Direct-flame incinerator
T-19	STORAGE TANKS/VESSELS	N/A	R5112-0003	30 TAC Chapter 115, Storage of VOCs	Control Device Type = Other vapor destruction unit
T-19	STORAGE TANKS/VESSELS	N/A	R5112-0006	30 TAC Chapter 115, Storage of VOCs	Control Device Type = Carbon adsorber (non-regenerative).
T-19	STORAGE TANKS/VESSELS	N/A	60Kb-001	40 CFR Part 60, Subpart Kb	No changing attributes.
T-19	STORAGE TANKS/VESSELS	N/A	60Kb-002	40 CFR Part 60, Subpart Kb	No changing attributes.
T-19	STORAGE TANKS/VESSELS	N/A	60Kb-003	40 CFR Part 60, Subpart Kb	No changing attributes.
WELDING	SRIC ENGINES	N/A	R7ICI-0003	30 TAC Chapter 117, Subchapter B	No changing attributes.
WELDING	SRIC ENGINES	N/A	60IIII-0002	40 CFR Part 60, Subpart IIII	No changing attributes.
WELDING	SRIC ENGINES	N/A	63ZZZZ-0002	40 CFR Part 63, Subpart ZZZZ	No changing attributes.

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
BARGE-DOCK	EU	R5211-0001	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
BARGE-DOCK	EU	R5211-0002	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(2)(A) § 115.212(a)(2) [G]§ 115.212(a)(7) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Any plant, excluding gasoline bulk plants, which loads less than 20,000 gpd of VOC with a true vapor pressure of 0.5 psia or greater is exempt from the requirements of this division, except for the specified requirements.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B) § 115.216(3)(D)	None
ENG1	EU	R7ICI-0002	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(B)	CO emissions must not exceed 3.0 g/hp-hr for stationary internal combustion engines.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a)(2)(C) § 117.340(h) § 117.8000(b) § 117.8000(c) § 117.8000(c)(2) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) § 117.8140(a) § 117.8140(a)(1) § 117.8140(a)(2) § 117.8140(a)(2)(A) [G]§	§ 117.345(a) § 117.345(f) [G]§ 117.345(f)(10) § 117.345(f)(3) § 117.345(f)(3)(A) § 117.345(f)(3)(A)(ii) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							117.8140(a)(2)(B) § 117.8140(b)		
ENG1	EU	R7ICI-0002	NO_X	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(9)(E)(vi)(III) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) [G]§ 117.310(f) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(2)(C) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO_x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a)(2)(C) § 117.340(h) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.340(p)(2)(A) § 117.340(p)(2)(B) § 117.340(p)(2)(C) § 117.8000(b) § 117.8000(c) § 117.8000(c)(1) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) § 117.8140(a) § 117.8140(a)(1) § 117.8140(a)(2) § 117.8140(a)(2)(A) [G]§ 117.8140(a)(2)(B) § 117.8140(b)	§ 117.345(a) § 117.345(f) [G]§ 117.345(f)(10) § 117.345(f)(3) § 117.345(f)(3)(A) § 117.345(f)(3)(A)(ii) § 117.345(f)(3)(B) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) § 117.340(p)(2)(D) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7)
ENG1	EU	60IIII-0001	CO	40 CFR Part 60, Subpart IIII	§ 60.4204(b) § 1039.101 § 60.4201(a) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) § 60.4218	Owners and operators of non-emergency stationary CI ICE with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder	None	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						and is a 2007 model year and later must comply with a CO emission limit of 3.5 g/KW-hr as stated in 40 CFR 60.4201(a) and 40 CFR 89.112(a) and 40 CFR 1039.102 and 40 CFR 1039.101.			
ENG1	EU	60IIII-0001	NO_X	40 CFR Part 60, Subpart IIII	§ 60.4204(b) § 1039.101 § 60.4201(a) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) § 60.4218	Owners and operators of non-emergency stationary CI ICE with a maximum engine power greater than or equal to 56 KW but less than 560 KW and a displacement of less than 10 liters per cylinder and is a 2014 model year and later must comply with a NOx emission limit of 0.40 g/KW-hr as stated in 40 CFR 60.4201(a) and 40 CFR 1039.102 and 40 CFR 1039.101.	None	None	None
ENG1	EU	60IIII-0001	Nonmethane Hydrocarbons	40 CFR Part 60, Subpart IIII	§ 60.4204(b) § 1039.101 § 60.4201(a) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) § 60.4218	Owners and operators of non-emergency stationary CI ICE with a maximum engine power greater than or equal to 56 KW but less than 560 KW and a displacement of less than 10 liters per cylinder and is a 2014 model year and later must comply with an NMHC emission limit of 0.19 g/KW-hr as stated in 40 CFR 60.4201(a) and 40 CFR 1039.102 and 40 CFR 1039.101.	None	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
ENG1	EU	60IIII-0001	PM	40 CFR Part 60, Subpart IIII	§ 60.4204(b) § 1039.101 § 60.4201(a) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) § 60.4218	Owners and operators of non-emergency stationary CI ICE with a maximum engine power greater than or equal to 130 KW and less than 560 KW and a displacement of less than 10 liters per cylinder and is a 2011 model year and later must comply with a PM emission limit of 0.02 g/KW-hr as stated in 40 CFR 60.4201(a) and 40 CFR 1039.102 and 40 CFR 1039.101.	None	None	None
ENG1	EU	63ZZZZ-0001	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.	None	None	None
GRPACIDTNK	EU	R5112-0001	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						division.			
PKGBOILSTK	EU	R7ICI-0001	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(B) § 117.310(c)(3)	CO emissions must not exceed 400 ppmv at 3.0% O 2, dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a) § 117.8000(b) § 117.8000(c) § 117.8000(c)(2) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) ** See Periodic Monitoring Summary	§ 117.345(a) § 117.345(f) § 117.345(f)(1) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7)
PKGBOILSTK	EU	R7ICI-0001	NO_X	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(1)(C) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(2)(C) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO_x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.340(p)(2)(A) § 117.340(p)(2)(B) § 117.340(p)(2)(C) § 117.8000(b) § 117.8000(c) § 117.8000(c)(1) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) § 117.340(p)(2)(D) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
PKGBOILSTK	EU	60Dc-001	PM	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a)
PKGBOILSTK	EU	60Dc-001	PM (Opacity)	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a)
PKGBOILSTK	EU	60Dc-001	SO_2	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a)
PREHTRSTK	EU	R7ICI-0001	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(B) § 117.310(c)(3)	CO emissions must not exceed 400 ppmv at 3.0% O 2, dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a) § 117.8000(b) § 117.8000(c) § 117.8000(c)(2) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) ** See Periodic Monitoring Summary	§ 117.345(a) § 117.345(f) § 117.345(f)(1) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
PREHTRSTK	EU	R7ICI-0001	NO_X	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(8)(A)(ii) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(2)(C) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO_x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.340(p)(2)(A) § 117.340(p)(2)(B) § 117.340(p)(2)(C) § 117.8000(b) § 117.8000(c) § 117.8000(c)(1) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) § 117.340(p)(2)(D) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7)
PRO-REGEN	EU	REG2-002	H_2SO_4	30 TAC Chapter 112, Sulfur Compounds	§ 112.41(b) § 112.41(b)(1)	Sulfuric acid or oleum facilities may not permit emissions of H2SO4 mist to exceed 0.50 lb/ton (0.25 gram/kg) of 100% H2SO4 produced when burning specified compounds by the contact process.	§ 112.43(b) § 112.43(c) [G]§ 112.43(c)(1) [G]§ 112.43(c)(2) § 112.45(a)	[G]§ 112.45(b)	None
PRO-REGEN	EU	REG2-002	SO_2	30 TAC Chapter 112, Sulfur Compounds	§ 112.6(a)	Except as provided in §112.5 and in §112.14 no person may cause, suffer, allow, or permit emissions of SO2 from any sulfuric acid plant to exceed the emission limits set by the specified equation.	§ 112.2(a) § 112.6(c)	§ 112.2(c)	§ 112.2(b)
PRO-REGEN	PRO	60H-001	H_2SO_4	40 CFR Part 60, Subpart H	§ 60.83(a)(1)	No owner or operator shall discharge any gases	§ 60.85(a) § 60.85(b)(1)	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						containing acid mist, expressed as H2SO4, in excess of 0.075 kg per metric ton (0.15 lb per ton) of acid produced, the production being expressed as 100% H2SO4.	§ 60.85(b)(2) § 60.85(b)(3)		
PRO-REGEN	PRO	60H-001	PM (Opacity)	40 CFR Part 60, Subpart H	§ 60.83(a)(2)	No owner or operator shall discharge any gases exhibiting 10% opacity, or greater.	§ 60.85(a) § 60.85(b)(4)	None	None
PRO-REGEN	PRO	60H-001	SO_2	40 CFR Part 60, Subpart H	§ 60.82(a)	On and after the §60.8 performance test, no owner or operator shall discharge gases containing SO2 in excess of 2 kg per metric ton (4.0 lb per ton) of acid produced into the atmosphere.	§ 60.84(a) § 60.84(b) § 60.84(c) § 60.84(e) § 60.85(a) § 60.85(b)(1) § 60.85(b)(2) § 60.85(b)(3) ** See CAM Summary	None	§ 60.84(e)
T-18	EU	R5112-0002	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(3) § 115.112(e)(3)(A) § 115.112(e)(3)(A)(i) § 115.112(e)(3)(A)(ii)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	§ 115.115(a) § 115.115(a)(1) § 115.116(a)(1) [G]§ 115.117 ** See CAM Summary	§ 115.118(a)(4) § 115.118(a)(4)(A) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
T-18	EU	R5112-0003	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(3) § 115.112(e)(3)(A) § 115.112(e)(3)(A)(i) § 115.112(e)(3)(A)(ii)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	§ 115.115(a) § 115.115(a)(6) § 115.116(a)(1) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(F) § 115.118(a)(5) § 115.118(a)(7)	None
T-18	EU	R5112-0006	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(3) § 115.112(e)(3)(A) § 115.112(e)(3)(A)(i) § 115.112(e)(3)(A)(ii)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	§ 115.115(a) § 115.115(a)(3) § 115.115(a)(3)(B) § 115.116(a)(1) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(C) § 115.118(a)(4)(C)(ii) § 115.118(a)(5) § 115.118(a)(7)	None
T-18	EU	60Kb-001	VOC	40 CFR Part 60, Subpart Kb	[G]§ 60.112b(a)(3)	Storage vessels specified in §60.112b(a) and equipped with a closed vent system/control device are to	[G]§ 60.113b(c)(1) § 60.113b(c)(2) § 60.116b(a) § 60.116b(b)	§ 60.115b [G]§ 60.115b(c) § 60.116b(a) § 60.116b(b)	[G]§ 60.113b(c)(1) § 60.115b

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						meet the specifications of §60.112b(a)(3)(i)-(ii).	§ 60.116b(e) § 60.116b(e)(1) [G]§ 60.116b(e)(3) [G]§ 60.485(b) ** See CAM Summary		
T-18	EU	60Kb-002	VOC	40 CFR Part 60, Subpart Kb	[G]§ 60.112b(a)(3)	Storage vessels specified in §60.112b(a) and equipped with a closed vent system/control device are to meet the specifications of §60.112b(a)(3)(i)-(ii).	[G]§ 60.113b(c)(1) § 60.113b(c)(2) § 60.116b(a) § 60.116b(b) § 60.116b(e) § 60.116b(e)(1) [G]§ 60.116b(e)(3) [G]§ 60.485(b) ** See Periodic Monitoring Summary	§ 60.115b [G]§ 60.115b(c) § 60.116b(a) § 60.116b(b)	[G]§ 60.113b(c)(1) § 60.115b
T-18	EU	60Kb-003	VOC	40 CFR Part 60, Subpart Kb	[G]§ 60.112b(a)(3)	Storage vessels specified in §60.112b(a) and equipped with a closed vent system/control device are to meet the specifications of §60.112b(a)(3)(i)-(ii).	[G]§ 60.113b(c)(1) § 60.113b(c)(2) § 60.116b(a) § 60.116b(b) § 60.116b(e) § 60.116b(e)(1) [G]§ 60.116b(e)(3) [G]§ 60.485(b) ** See Periodic Monitoring Summary	§ 60.115b [G]§ 60.115b(c) § 60.116b(a) § 60.116b(b)	[G]§ 60.113b(c)(1) § 60.115b
T-19	EU	R5112-0002	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(3) § 115.112(e)(3)(A) § 115.112(e)(3)(A)(i) § 115.112(e)(3)(A)(ii)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control	§ 115.115(a) § 115.115(a)(1) § 115.116(a)(1) [G]§ 115.117 ** See CAM Summary	§ 115.118(a)(4) § 115.118(a)(4)(A) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.			
T-19	EU	R5112-0003	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(3) § 115.112(e)(3)(A) § 115.112(e)(3)(A)(i) § 115.112(e)(3)(A)(ii)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	§ 115.115(a) § 115.115(a)(6) § 115.116(a)(1) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(F) § 115.118(a)(5) § 115.118(a)(7)	None
T-19	EU	R5112-0006	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(3) § 115.112(e)(3)(A) § 115.112(e)(3)(A)(i) § 115.112(e)(3)(A)(ii)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2	§ 115.115(a) § 115.115(a)(3) § 115.115(a)(3)(B) § 115.116(a)(1) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(C) § 115.118(a)(4)(C)(ii) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						of subsection (a)(1) of this paragraph for crude oil and condensate.			
T-19	EU	60Kb-001	VOC	40 CFR Part 60, Subpart Kb	[G]§ 60.112b(a)(3)	Storage vessels specified in §60.112b(a) and equipped with a closed vent system/control device are to meet the specifications of §60.112b(a)(3)(i)-(ii).	[G]§ 60.113b(c)(1) § 60.113b(c)(2) § 60.116b(a) § 60.116b(b) § 60.116b(e) § 60.116b(e)(1) [G]§ 60.116b(e)(3) [G]§ 60.485(b) ** See CAM Summary	§ 60.115b [G]§ 60.115b(c) § 60.116b(a) § 60.116b(b)	[G]§ 60.113b(c)(1) § 60.115b
T-19	EU	60Kb-002	VOC	40 CFR Part 60, Subpart Kb	[G]§ 60.112b(a)(3)	Storage vessels specified in §60.112b(a) and equipped with a closed vent system/control device are to meet the specifications of §60.112b(a)(3)(i)-(ii).	[G]§ 60.113b(c)(1) § 60.113b(c)(2) § 60.116b(a) § 60.116b(b) § 60.116b(e) § 60.116b(e)(1) [G]§ 60.116b(e)(3) [G]§ 60.485(b) ** See Periodic Monitoring Summary	§ 60.115b [G]§ 60.115b(c) § 60.116b(a) § 60.116b(b)	[G]§ 60.113b(c)(1) § 60.115b
T-19	EU	60Kb-003	VOC	40 CFR Part 60, Subpart Kb	[G]§ 60.112b(a)(3)	Storage vessels specified in §60.112b(a) and equipped with a closed vent system/control device are to meet the specifications of §60.112b(a)(3)(i)-(ii).	[G]§ 60.113b(c)(1) § 60.113b(c)(2) § 60.116b(a) § 60.116b(b) § 60.116b(e) § 60.116b(e)(1) [G]§ 60.116b(e)(3) [G]§ 60.485(b) ** See Periodic Monitoring Summary	§ 60.115b [G]§ 60.115b(c) § 60.116b(a) § 60.116b(b)	[G]§ 60.113b(c)(1) § 60.115b
WELDING	EU	R7ICI-0003	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(B)	CO emissions must not exceed 3.0 g/hp-hr for	[G]§ 117.335(a)(1) § 117.335(a)(4)	§ 117.345(a) § 117.345(f)	§ 117.335(b) § 117.335(g)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						stationary internal combustion engines.	§ 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a)(2)(C) § 117.340(h) § 117.8000(b) § 117.8000(c) § 117.8000(c)(2) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) § 117.8140(a) § 117.8140(a)(1) § 117.8140(a)(2) § 117.8140(a)(2)(A) [G]§ 117.8140(a)(2)(B) § 117.8140(b)	[G]§ 117.345(f)(10) § 117.345(f)(3) § 117.345(f)(3)(A) § 117.345(f)(3)(A)(ii) § 117.345(f)(9)	[G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7)
WELDING	EU	R7ICI-0003	NO_X	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(9)(E)(iv)(II) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) [G]§ 117.310(f) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(2)(C) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO_x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a)(2)(C) § 117.340(h) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.340(p)(2)(A) § 117.340(p)(2)(B) § 117.340(p)(2)(C) § 117.8000(b) § 117.8000(c) § 117.8000(c)(1) § 117.8000(c)(3) § 117.8000(c)(5)	§ 117.345(a) § 117.345(f) [G]§ 117.345(f)(10) § 117.345(f)(3) § 117.345(f)(3)(A) § 117.345(f)(3)(A)(ii) § 117.345(f)(3)(B) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) § 117.340(p)(2)(D) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						comply with § 117.320.	§ 117.8000(c)(6) [G]§ 117.8000(d) § 117.8140(a) § 117.8140(a)(1) § 117.8140(a)(2) § 117.8140(a)(2)(A) [G]§ 117.8140(a)(2)(B) § 117.8140(b)		
WELDING	EU	60IIII-0002	NO_X	40 CFR Part 60, Subpart IIII	§ 60.4204(a)-Table 1 § 60.4206 § 60.4207(b) § 60.4211(b) § 60.4218	Owners and operators of non-emergency stationary CI ICE with a maximum engine power greater than or equal to 37 KW and a displacement of less than 10 liters per cylinder and is a pre-2007 model year must comply with a NOx emission limit of 9.2 g/KW-hr, as listed in Table 1 to this subpart.	None	§ 60.4211(b)(3)	None
WELDING	EU	63ZZZZ-0002	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.	None	None	None

Additional Monitoring Requirements

CAM Summary

Unit/Group/Process Information	
ID No.: PRO-REGEN	
Control Device ID No.: AMMONIA SCRUBB	Control Device Type: Sulfur dioxide scrubber
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart H	SOP Index No.: 60H-001
Pollutant: SO_2	Main Standard: § 60.82(a)
Monitoring Information	
Indicator: pH	
Minimum Frequency: once per day	
Averaging Period: N/A	
Deviation Limit: Minimum pH is 4.5	
CAM Text: Each monitoring device shall be cleaned with an automatic cleaning system, or cleaned weekly using hydraulic, chemical, or mechanical cleaning. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least weekly, whichever is more frequent, and shall be accurate to within ± 0.5 pH unit.	

CAM Summary

Unit/Group/Process Information	
ID No.: PRO-REGEN	
Control Device ID No.: AMMONIA SCRUBB	Control Device Type: Sulfur dioxide scrubber
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart H	SOP Index No.: 60H-001
Pollutant: SO_2	Main Standard: § 60.82(a)
Monitoring Information	
Indicator: Liquid Flow Rate	
Minimum Frequency: once per day	
Averaging Period: N/A	
Deviation Limit: Minimum liquid flow rate is 650 gallons per minute	
CAM Text: Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following: ± 2% of span; or ± 5% of design liquid flow rate.	

CAM Summary

Unit/Group/Process Information	
ID No.: T-18	
Control Device ID No.: PRO-REGEN	Control Device Type: Thermal incinerator (direct flame incinerator/regenerative thermal oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-0002
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: N/A	
Deviation Limit: Minimum Temperature = 1500 °F	
CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following: ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius.	

CAM Summary

Unit/Group/Process Information	
ID No.: T-18	
Control Device ID No.: PRO-REGEN	Control Device Type: Thermal incinerator (direct flame incinerator/regenerative thermal oxidizer)
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Kb	SOP Index No.: 60Kb-001
Pollutant: VOC	Main Standard: [G]§ 60.112b(a)(3)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: N/A	
Deviation Limit: Minimum Temperature = 1500 °F	
CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following: ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius.	

CAM Summary

Unit/Group/Process Information	
ID No.: T-19	
Control Device ID No.: PRO-REGEN	Control Device Type: Thermal incinerator (direct flame incinerator/regenerative thermal oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-0002
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: N/A	
Deviation Limit: Minimum Temperature = 1500 °F	
CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following: ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius.	

CAM Summary

Unit/Group/Process Information	
ID No.: T-19	
Control Device ID No.: PRO-REGEN	Control Device Type: Thermal incinerator (direct flame incinerator/regenerative thermal oxidizer)
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Kb	SOP Index No.: 60Kb-001
Pollutant: VOC	Main Standard: [G]§ 60.112b(a)(3)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: N/A	
Deviation Limit: Minimum Temperature = 1500 °F	
CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following: ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: PKGBOILSTK	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 117, Subchapter B	SOP Index No.: R7ICI-0001
Pollutant: CO	Main Standard: § 117.310(c)(1)
Monitoring Information	
Indicator: Fuel flow rate and hours of operation	
Minimum Frequency: Monthly	
Averaging Period: N/A	
Deviation Limit: A fuel flow that exceeds a calculated heat input of 35 MMBtu/hr shall be considered and reported as a deviation.	
Periodic Monitoring Text: Measure and record the fuel flow rate when the boiler is in operation. The monitoring instrumentation shall be maintained, calibrated, and operated in accordance with the manufacturer's specifications or other written procedures. The fuel flow rate shall be used in conjunction with the permitted NSR CO emission factor to demonstrate compliance with the NSR MAERT limitations, which corresponds to a CO concentration less than 30 TAC Chapter 117 CO emission limitation of 400 ppmv.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: PREHTRSTK	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 117, Subchapter B	SOP Index No.: R7ICI-0001
Pollutant: CO	Main Standard: § 117.310(c)(1)
Monitoring Information	
Indicator: Fuel flow rate and hours of operation	
Minimum Frequency: Monthly	
Averaging Period: N/A	
Deviation Limit: A fuel flow that exceeds a calculated heat input of 30 MMBtu/hr shall be considered and reported as a deviation.	
Periodic Monitoring Text: Measure and record the fuel flow rate when the preheater is in operation. The monitoring instrumentation shall be maintained, calibrated, and operated in accordance with the manufacturer's specifications or other written procedures. The fuel flow rate shall be used in conjunction with the permitted NSR CO emission factor to demonstrate compliance with the NSR MAERT limitations, which corresponds to a CO concentration less than 30 TAC Chapter 117 CO emission limitation of 400 ppmv.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: T-18	
Control Device ID No.: SCRUB-VCU	Control Device Type: Vapor combustor
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Kb	SOP Index No.: 60Kb-002
Pollutant: VOC	Main Standard: [G]§ 60.112b(a)(3)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: N/A	
Deviation Limit: Minimum Temperature = 1400 °F	
Periodic Monitoring Text: Measure and record the combustion temperature in the combustion chamber or immediately downstream of the combustion chamber. The monitoring instrumentation shall be maintained, calibrated and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: T-18	
Control Device ID No.: SCRUB-CAS	Control Device Type: Carbon adsorption system (non-regenerative)
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Kb	SOP Index No.: 60Kb-003
Pollutant: VOC	Main Standard: [G]§ 60.112b(a)(3)
Monitoring Information	
Indicator: Carbon Replacement Interval	
Minimum Frequency: At each replacement of carbon canister	
Averaging Period: N/A	
Deviation Limit: Any period which exceeds the maximum carbon replacement interval. The records of the maximum carbon replacement interval shall be maintained.	
Periodic Monitoring Text: Monitor and record the replacement time interval of the carbon canister(s), as determined by the maximum design flow rate and organic concentration in the gas stream vented to the carbon adsorption system. Any data, collected for a period which exceeds the maximum carbon replacement interval shall be considered and reported as a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: T-19	
Control Device ID No.: SCRUB-VCU	Control Device Type: Vapor combustor
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Kb	SOP Index No.: 60Kb-002
Pollutant: VOC	Main Standard: [G]§ 60.112b(a)(3)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: N/A	
Deviation Limit: Minimum Temperature = 1400 °F	
Periodic Monitoring Text: Measure and record the combustion temperature in the combustion chamber or immediately downstream of the combustion chamber. The monitoring instrumentation shall be maintained, calibrated and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: T-19	
Control Device ID No.: SCRUB-CAS	Control Device Type: Carbon adsorption system (non-regenerative)
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Kb	SOP Index No.: 60Kb-003
Pollutant: VOC	Main Standard: [G]§ 60.112b(a)(3)
Monitoring Information	
Indicator: Carbon Replacement Interval	
Minimum Frequency: At each replacement of carbon canister	
Averaging Period: N/A	
Deviation Limit: Any period which exceeds the maximum carbon replacement interval. The records of the maximum carbon replacement interval shall be maintained.	
Periodic Monitoring Text: Monitor and record the replacement time interval of the carbon canister(s), as determined by the maximum design flow rate and organic concentration in the gas stream vented to the carbon adsorption system. Any data, collected for a period which exceeds the maximum carbon replacement interval shall be considered and reported as a deviation.	

Permit Shield

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
BTCT	N/A	40 CFR Part 63, Subpart Q	Cooling tower has not operated with chromium based chemicals on or after 09/18/1994.
DOCKVC	N/A	30 TAC Chapter 117, Subchapter B	Heat Capacity of vapor combustor is < 40 MMBtu/hr
GRPACIDTNK	T-5, T-6, T-7, T-8	40 CFR Part 60, Subpart K	Tanks were constructed prior to June 11, 1973.
PREHTRSTK	N/A	40 CFR Part 63, Subpart DDDDD	Facility is an area source of HAPs.
PRO-REGEN	N/A	30 TAC Chapter 117, Subchapter B	The furnace is exempt on the basis of being a sulfuric acid regeneration unit.

New Source Review Authorization References

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: PSDTX695M3	Issuance Date: 08/14/2020
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 9565	Issuance Date: 08/14/2020
Authorization No.: 56534	Issuance Date: 12/22/2016
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 7	Version No./Date: 09/12/1989
Number: 106.183	Version No./Date: 09/04/2000
Number: 106.227	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.265	Version No./Date: 09/04/2000
Number: 106.371	Version No./Date: 03/14/1997
Number: 106.412	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 03/14/1997
Number: 106.478	Version No./Date: 03/14/1997
Number: 106.511	Version No./Date: 09/04/2000
Number: 106.512	Version No./Date: 06/13/2001

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization**
BARGE-DOCK	SPENT ACID LOADING	56534
BTCT	COOLING TOWER	106.371/03/14/1997
DOCKVC	DOCK VAPOR COMBUSTOR	56534
ENG1	AIR COMPRESSOR ENGINE	106.512/06/13/2001
PKGBOILSTK	PACKAGE BOILER	106.183/09/04/2000
PREHTRSTK	PREHEATER	106.183/09/04/2000
PRO-REGEN	REGEN PROCESS UNIT	9565, PSDTX695M3
T-18	SPENT ACID TANK 18	106.261/11/01/2003, 106.262/11/01/2003 [155134]
T-19	SPENT ACID TANK 19	106.261/11/01/2003, 106.262/11/01/2003 [155134]
T-5	SPENT ACID STORAGE TANK	56534
T-6	SPENT ACID STORAGE	56534
T-7	SPENT ACID STORAGE TANK	56534
T-8	SPENT ACID STORAGE TANK	56534
WELDING	WELDING ENGINE	106.227/09/04/2000

**This column may include Permit by Rule (PBR) numbers and version dates, PBR Registration numbers in brackets, Standard Permit Registration numbers, Minor NSR permit numbers, and Major NSR permit numbers.

Appendix A

Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM ..... actual cubic feet per minute
AMOC ..... alternate means of control
ARP ..... Acid Rain Program
ASTM ..... American Society of Testing and Materials
B/PA ..... Beaumont/Port Arthur (nonattainment area)
CAM ..... Compliance Assurance Monitoring
CD ..... control device
CEMS ..... continuous emissions monitoring system
CFR ..... Code of Federal Regulations
COMS ..... continuous opacity monitoring system
CVS ..... closed vent system
D/FW ..... Dallas/Fort Worth (nonattainment area)
EP ..... emission point
EPA ..... U.S. Environmental Protection Agency
EU ..... emission unit
FCAA Amendments ..... Federal Clean Air Act Amendments
FOP ..... federal operating permit
gr/100 scf ..... grains per 100 standard cubic feet
HAP ..... hazardous air pollutant
H/G/B ..... Houston/Galveston/Brazoria (nonattainment area)
H_2S ..... hydrogen sulfide
ID No. ..... identification number
lb/hr ..... pound(s) per hour
MACT ..... Maximum Achievable Control Technology (40 CFR Part 63)
MMBtu/hr ..... Million British thermal units per hour
NA ..... nonattainment
N/A ..... not applicable
NADB ..... National Allowance Data Base
NESHAP ..... National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
NO_x ..... nitrogen oxides
NSPS ..... New Source Performance Standard (40 CFR Part 60)
NSR ..... New Source Review
ORIS ..... Office of Regulatory Information Systems
Pb ..... lead
PBR ..... Permit By Rule
PEMS ..... predictive emissions monitoring system
PM ..... particulate matter
ppmv ..... parts per million by volume
PRO ..... process unit
PSD ..... prevention of significant deterioration
psia ..... pounds per square inch absolute
SIP ..... state implementation plan
SO_2 ..... sulfur dioxide
TCEQ ..... Texas Commission on Environmental Quality
TSP ..... total suspended particulate
TVP ..... true vapor pressure
U.S.C. ..... United States Code
VOC ..... volatile organic compound

Appendix B

Major NSR Summary Table

Permit Numbers: 9565 and PSDTX695M3					Issuance Date: 08/14/2020		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lbs/hour	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
EMSCRUBSTK	Spent Acid Scrubber - Scrubber Liquor Storage Tanks, AML Truck and Railcar Loading	SO_2	<0.01	<0.01	2, 15, 16, 17, 19, 26	2, 6, 14, 17, 18, 21, 26	2, 26
		NH_3	0.01	<0.01			
AMLTLDGU	Uncaptured AML Truck Loading	SO_2	<0.01	<0.01	2, 15, 17	2, 6, 14, 17	2
		NH_3	<0.01	<0.01			
AMLRLDGU	Uncaptured AML Railcar Loading	SO_2	<0.01	<0.01	2, 15	2, 6, 14	2
		NH_3	<0.01	<0.01			
FUGAMLV	AMLV Fugitive Emissions	SO_2	<0.01	0.02	2	2, 6	2
		NH_3	<0.01	<0.01			
FUGAS	AS Fugitive Emissions	SO_2	0.01	0.05	2, 22, 23	2, 6, 22, 23	2
		NH_3	0.04	0.17			
		H_2SO_4	0.01	<0.01			

Major NSR Summary Table

Permit Numbers: 9565 and PSDTX695M3					Issuance Date: 08/14/2020		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lbs/hour	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
FUGNH3	Ammonia Fugitive Emissions	NH_3	0.09	0.37	2, 23	2, 6, 23	2
FUGAAG	Amine Acid Gas Fugitive Emissions	H_2S	0.06	0.13	2, 23	2, 6, 23	2
		VOC	<0.01	<0.01			
FUGPROC	Process Fugitive Emissions	SO_2	0.07	0.13	2, 22	2, 6, 22	2
1	Ammonia (NH_3) Scrubber	SO_2 (6)	114.13	441.65	2, 3, 4, 5, 7, 9, 11, 13, 24, 25, 28	2, 3, 4, 5, 6, 7, 9, 11, 13, 24, 25, 28	2, 9, 11, 28
		VOC	0.01	0.01			
		NO_x	19.75	54.91			
		CO	5.50	24.09			
		PM	3.19	11.32			
		PM_{10}	3.19	11.32			
		$PM_{2.5}$	3.19	11.32			
		H_2SO_4 (6)	6.88	10.04			

Major NSR Summary Table

Permit Numbers: 9565 and PSDTX695M3					Issuance Date: 08/14/2020		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		NH_3	0.40	1.70			
		Cl_2	0.01	0.02			
		HCl	0.06	0.26			
		Ag	0.03	0.12			
		As	0.13	0.52			
		Ba	0.03	0.12			
		Be	0.02	0.08			
		Cd	0.02	0.08			
		Cr	0.67	2.82			
		Hg	0.0018	0.0041			
		Ni	0.56	2.42			
		Pb	0.06	0.24			
		Sb	0.03	0.12			

Major NSR Summary Table

Permit Numbers: 9565 and PSDTX695M3					Issuance Date: 08/14/2020		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		Se	0.05	0.20			
		TI	0.02	0.08			
RACKFUG	Rack Process Fugitives (5)	VOC	0.01	0.01	2, 23	2, 6, 23	2
		H_2S	0.01	0.01			
FUGRC	Railcar Piping and Components (5)	VOC	0.01	0.02	2, 23	2, 6, 23	2
		H_2SO_4 (6)	0.01	0.01			

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
H_2SO_4 - sulfuric acid mist
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM10 and PM2.5, as represented
PM_{10} - particulate matter (PM) equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no PM greater than 10 microns is emitted.
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
NH_3 - ammonia
Ag - silver
As - arsenic
Ba - barium
Be - beryllium

Cd - cadmium
Cr - chromium
Cl_2 - chlorine
HCl - hydrogen chloride
Hg - mercury
Ni - nickel
Pb - lead
Sb - antimony
Se - selenium
TI - thallium
H_2S - hydrogen sulfide

(4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
(6) Prevention of Significant Deterioration pollutant.

Texas Commission on Environmental Quality
Air Quality Permit

A Permit Is Hereby Issued To
Eco Services Operations Corp.
Authorizing the Construction and Operation of
Sulfuric Acid Plant
Located at **Baytown, Harris County, Texas**
Latitude 29° 44' 51" Longitude −95° 0' 7"

Permits: 9565 and PSDTX695M3

Amendment Date: August 14, 2020

Expiration Date: August 8, 2023

For the Commission

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code (TAC) Section 116.116 (30 TAC § 116.116)] [1]
2. **Voiding of Permit**. A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1)the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of $5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120]
3. **Construction Progress**. Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
4. **Start-up Notification**. The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
5. **Sampling Requirements**. If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]
6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and

operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction in a timely manner; comply with any additional recordkeeping requirements specified in special conditions in the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]

8. **Maximum Allowable Emission Rates**. The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)] [1]
9. **Maintenance of Emission Control**. The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification in accordance with 30 TAC §101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC§ 116.115(b)(2)(G)]
10. **Compliance with Rules**. Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
13. **Emissions** from this facility must not cause or contribute to "air pollution" as defined in Texas Health and Safety Code (THSC) §382.003(3) or violate THSC § 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit. [1]

[1] Please be advised that the requirements of this provision of the general conditions may not be applicable to greenhouse gas emissions.

Common Acronyms in Air Permits

°C = Temperature in degrees Celsius
°F = Temperature in degrees Fahrenheit
°K = Temperature in degrees Kelvin
µg = microgram
$\mu g/m^3$ = microgram per cubic meter
acfm = actual cubic feet per minute
AMOC = alternate means of control
AOS = alternative operating scenario
AP-42 = Air Pollutant Emission Factors, 5th edition
APD = Air Permits Division
API = American Petroleum Institute
APWL = air pollutant watch list
BPA = Beaumont/ Port Arthur
BACT = best available control technology
BAE = baseline actual emissions
bbl = barrel
bbl/day = barrel per day
bhp = brake horsepower
BMP = best management practices
Btu = British thermal unit
Btu/scf = British thermal unit per standard cubic foot or feet
CAA = Clean Air Act
CAM = compliance-assurance monitoring
CEMS = continuous emissions monitoring systems
cfm = cubic feet (per) minute
CFR = Code of Federal Regulations
CN = customer ID number
CNG = compressed natural gas
CO = carbon monoxide
COMS = continuous opacity monitoring system
CPMS = continuous parametric monitoring system
DFW = Dallas/ Fort Worth (Metroplex)
DE = destruction efficiency
DRE = destruction and removal efficiency
dscf = dry standard cubic foot or feet
dscfm = dry standard cubic foot or feet per minute
ED = (TCEQ) Executive Director
EF = emissions factor
EFR = external floating roof tank
EGU = electric generating unit
EI = Emissions Inventory
ELP = El Paso
EPA = (United States) Environmental Protection Agency
EPN = emission point number
ESL = effects screening level
ESP = electrostatic precipitator
FCAA = Federal Clean Air Act
FCCU = fluid catalytic cracking unit
FID = flame ionization detector
FIN = facility identification number
ft = foot or feet
ft/sec = foot or feet per second
g = gram
gal/wk = gallon per week
gal/yr = gallon per year
GLC = ground level concentration
GLC_{max} = maximum (predicted) ground-level concentration
gpm = gallon per minute
gr/1000scf = grain per 1000 standard cubic feet
gr/dscf = grain per dry standard cubic feet
H_2CO = formaldehyde
H_2S = hydrogen sulfide
H_2SO_4 = sulfuric acid
HAP = hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
HC = hydrocarbons
HCl = hydrochloric acid, hydrogen chloride
Hg = mercury
HGB = Houston/Galveston/Brazoria
hp = horsepower
hr = hour
IFR = internal floating roof tank
in H_2O = inches of water
in Hg = inches of mercury
IR = infrared
ISC3 = Industrial Source Complex, a dispersion model
ISCST3 = Industrial Source Complex Short-Term, a dispersion model
K = Kelvin; extension of the degree Celsius scaled-down to absolute zero
LACT = lease automatic custody transfer
LAER = lowest achievable emission rate
lb = pound
hp = horsepower
hr = hour lb/day = pound per day
lb/hr = pound per hour
lb/MMBtu = pound per million British thermal units
LDAR = Leak Detection and Repair (Requirements)
LNG = liquefied natural gas
LPG = liquefied petroleum gas
LT/D = long ton per day
m = meter
m^3 = cubic meter
m/sec = meters per second
MACT = maximum achievable control technology
MAERT = Maximum Allowable Emission Rate Table
MERA = Modeling and Effects Review Applicability
mg = milligram
mg/g = milligram per gram
mL = milliliter
MMBtu = million British thermal units
MMBtu/hr = million British thermal units per hour
MSDS = material safety data sheet
MSS = maintenance, startup, and shutdown
MW = megawatt
NAAQS = National Ambient Air Quality Standards
NESHAP = National Emission Standards for Hazardous Air Pollutants
NGL = natural gas liquids
NNSR = nonattainment new source review
NO_x = total oxides of nitrogen

NSPS = New Source Performance Standards
PAL = plant-wide applicability limit
PBR = Permit(s) by Rule
PCP = pollution control project
PEMS = predictive emission monitoring system
PID = photo ionization detector
PM = periodic monitoring
PM = total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
$PM_{2.5}$ = particulate matter equal to or less than 2.5 microns in diameter
PM_{10} = total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
POC = products of combustion
ppb = parts per billion
ppm = parts per million
ppmv = parts per million (by) volume
psia = pounds (per) square inch, absolute
psig = pounds (per) square inch, gage
PTE = potential to emit
RA = relative accuracy
RATA = relative accuracy test audit
RM = reference method
RVP = Reid vapor pressure
scf = standard cubic foot or feet
scfm = standard cubic foot or feet (per) minute
SCR = selective catalytic reduction
SIL = significant impact levels
SNCR = selective non-catalytic reduction
SO_2 = sulfur dioxide
SOCMI = synthetic organic chemical manufacturing industry
SRU = sulfur recovery unit
TAC = Texas Administrative Code
TCAA = Texas Clean Air Act
TCEQ = Texas Commission on Environmental Quality
TD = Toxicology Division
TLV = threshold limit value
TMDL = total maximum daily load
tpd = tons per day
tpy = tons per year
TVP = true vapor pressure
VOC = volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
VRU = vapor recovery unit or system

Special Conditions

Permit Numbers 9565 and PSDTX695M3

Emission Standards

1. This permit authorizes emissions only from those points listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and the facilities covered by this permit are authorized to emit subject to the emission rate limits on that table and other operating conditions specified in this permit.

2. These permitted facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency regulations in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), promulgated for the following: (PSD)

   A. Subparts A and Cd for Emission Guidelines and Compliance Times for Sulfuric Acid Production Units.

   B. Subparts A and H for Sulfuric Acid Plants.

   C. Alternative Monitoring Plan (AMP) for sulfur dioxide (SO_2) emissions.

3. The sulfuric acid (H_2SO_4) production rate is limited to 1,100 tons per day on a 12-month rolling average. The holder of this permit shall keep records of the daily H_2SO_4 production and the one-hour SO_2 emissions rates for each day of production. Records shall be made readily available to Texas Commission on Environmental Quality (TCEQ) personnel upon request, EPA personnel or any applicable local program with jurisdiction and may be used to determine compliance with the SO_2 emission limits specified in the maximum allowable emissions rates table (MAERT). (PSD)

4. The SO_2 emissions from the H_2SO_4 plant stack designated as Emission Point Number (EPN) 1 shall not exceed 2.49 pounds per ton of acid produced on an hourly basis. The SO_2 emissions from the H_2SO_4 plant stack designated as Emission Point No. EPN 1 shall not exceed 2.20 pounds per ton of acid produced on an annual basis. Production is expressed as 100 percent H_2SO_4. Records shall be updated once a week to demonstrate compliance with each production parameter. The SO_2 limits shall not be relaxed. (PSD) **(06/16)**

5. Sulfuric acid mist, expressed as H_2SO_4, shall not be discharged from the H_2SO_4 acid plant stack designated as EPN 1 in excess of 0.15 pounds per ton of acid produced on an hourly basis. Sulfuric acid mist, expressed as H_2SO_4, shall not be discharged from EPN 1 in excess of 0.10 pounds per ton of acid produced on an annual basis. Production is expressed as 100 percent H_2SO_4. Records shall be updated once a week to demonstrate compliance with each production parameter. The H_2SO_4 limits shall not be relaxed. (PSD) **(06/16)**

6. Any construction of new equipment that occurs for the use of adding a new chemical is not allowed through this special condition. New chemical(s) may be added through use of a permit by rule claim and/or registration under 30 TAC Chapter 106.

   A. Short-term (pounds per hour [lb/hr]) and annual (tons per year) emissions and calculations shall be completed for each chemical at each affected source; emission rates shall be calculated in accordance with the methods documented in the permit amendment application. The calculated emission rates shall not exceed the maximum allowable emission rate at any emission point.

   B. The Effect Screening Level (ESL) for the chemical shall be obtained from the current TCEQ ESL list or by written request to the TCEQ Toxicology Division.

C. The total emissions of any compound from all emission points in this permit must satisfy one of the following conditions:

(1) The total maximum emission rate from all sources is less than 0.04 lb/hr and the ESL greater than 2 µg/m^3;

$$(ER/ESL)N \leq (ER/ESL)E$$

(ER/ESL)N = plant wide maximum hourly emission rate based on maximum vapor pressure of new compound(s) divided by its ESL.

(ER/ESL)E = the highest ratio of any previously authorized compounds plant wide hourly emission rate based on maximum vapor pressure divided by its ESL (i.e., 0.261).

D. The permit holder shall maintain records of the information below and the demonstrations in steps A through C above. The following documentation is required for each compound:

(1) Chemical name(s), composition, and chemical abstract registry number if available.

(2) Molecular weight.

(3) Storage tanks, loading areas, and loading fugitive areas where the material is to be handled and the emission control device to be utilized.

(4) Date new compound handling commenced.

(5) Material Safety Data Sheet.

7. The H_2SO_4 furnace shall be operated with not less than 0.5 percent excess oxygen (O_2) and not more than 2400ºFahrenheit furnace exit temperature, averaged hourly. Above 1800ºF, excess O_2 shall not exceed 3 percent, averaged hourly. The furnace outlet temperature and O_2 content shall be continuously monitored and recorded.

Initial Determination of Compliance

8. Sampling ports and platform(s) shall be incorporated into the design of EPN 1 according to the specifications set forth in the attachment entitled “Chapter 2, Stack Sampling Facilities” of the TCEQ Sampling Procedures Manual. Alternate sampling facility designs must be submitted for approval to the TCEQ Regional Director.

9. The holder of this permit shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the stack designated as EPN 1. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. (PSD)

A. Sampling shall be conducted in accordance with Title 40 Code of Federal Regulations (40 CFR) Part 60, Appendix A, Method 7, “Determination of Nitrogen Oxide (NO_x) Emissions from Stationary Sources” and Method 8, “Determination of SO_2 and H_2SO_4 Emissions from Stationary Sources” and Method 10, “Determination of Carbon Monoxide (CO) Emissions from Stationary Sources” and other applicable testing methods.

B. The appropriate TCEQ Regional Office in the region where the source is located and applicable local air program(s) shall be contacted as soon as testing is scheduled, but not less than 45 days prior to sampling to schedule a pretest meeting.

The notice shall include:

(1) Date for pretest meeting.

(2) Date sampling will occur.

(3) Name of firm conducting sampling.

(4) Type of sampling equipment to be used.

(5) Method or procedure to be used in sampling.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports.

A written proposed description of any deviation from sampling procedures specified in permit provision or the TCEQ or EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Regional Office Director or the Director of the TCEQ in Austin shall approve or disapprove of any deviation from specified sampling procedures.

Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for New Source Performance Standard testing which must have EPA approval shall be submitted to the TCEQ Regional Office.

C. Air contaminants emitted from the H_2SO_4 acid plant stack designated as EPN 1 to be tested for include (but are not limited to) chlorine, CO, H_2SO_4, HCl, NO_x and SO_2, H_2SO_4 mist, antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, nickel, selenium, silver and thallium. These stack testing results shall be used to demonstrate compliance with Special Condition Nos. 1, 4, and 5.

D. Stack testing of EPN 1 shall be completed between 90 days and 180 days after permit amendment approval in 2009. Sampling shall occur at such other times as may be required by the Executive Director of the TCEQ. Requests for additional time to perform sampling shall be submitted to the TCEQ Regional Office. Additional time to comply with the applicable requirements of 40 CFR Part 60 and 40 CFR Part 61 requires prior approval and requests shall be submitted to the TCEQ Regional Office.

E. The sulfuric acid plant shall be sampled while operating at the maximum possible safe production rate (as determined by the permit holder) for the H_2SO_4 production unit at the time of testing. The H_2SO_4 production rate shall be monitored and recorded during the stack test. If the normal production rate of H_2SO_4 from this facility exceeds by more than 10 percent the tons per day maintained during sampling, the company must notify, in writing, the appropriate TCEQ Regional Office and the source may be subject to additional sampling to demonstrate continued compliance.

F. Copies of the final sampling report shall be forwarded to the TCEQ and the EPA within 60 days after sampling is completed. Sampling reports shall comply with the attached provisions of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:

One copy to the appropriate TCEQ Regional Office.

One copy to each appropriate local air pollution control program.

One copy to the Air Enforcement Branch, the EPA, Region 6, Dallas.

Continuous Demonstration of Compliance

10. At no time shall the hourly average ammonia (NH_3) liquor feed rate into the H_2SO_4 plant exceed 65 gallons per minute (gpm).

11. The holder of this permit shall install, calibrate, maintain and operate a continuous monitor to measure and record the feed rate of NH_3 liquor into the H_2SO_4 plant. The monitoring data shall be reduced to hourly average flow rates at least once every day.

    Semiannual reports of all excessive feed rates and monitor downtime shall be submitted to the appropriate TCEQ Regional Office. These reports shall include the information described in 40 CFR § 60.7(c).

    All monitoring data, quality assurance data, excessive feed rate data and monitor downtime data shall be maintained by the source for a period of five years and shall be made readily available to the TCEQ or the EPA upon request.

12. At no time shall the hourly rolling average of hydrogen sulfide gas flow to the furnace exceed 150,000 standard cubic feet per hour.

13. The holder of this permit shall install, calibrate, maintain and operate a continuous emission monitoring system (CEMS) to measure and record the in-stack concentration of SO_2 from EPN 1. (PSD)

    A. The CEMS calibration shall be checked daily and the CEMS shall be zeroed and spanned using cylinder gas at least once a week and corrective action taken when the results differ by greater than ±5 percent from the tagged cylinder gas value.

    B. The monitoring data shall be reduced to one-hour average concentrations at least once every month using a minimum of four equally-spaced data points from each one-hour period. The individual average concentrations shall be reduced to units of the permit allowable emissions rates in pounds of SO_2 per hour at least once every month.

    C. All monitoring data and quality-assurance data shall be maintained by the source for a period of five years and shall be made readily available to TCEQ personnel, EPA personnel or any local program with jurisdiction upon request. The data from the CEMS may, at the discretion of the TCEQ, EPA personnel or any local program with jurisdiction, be used to determine compliance with the SO_2 emission limits specified in MAERT.

    D. The CEMS must operate at all times when sulfur bearing compounds (except natural gas) are being fed to the furnace, but need not operate during CEMS breakdown, repairs for calibration checks and zero span adjustments.

    E. CEMS shall be used to demonstrate compliance with the SO_2 emission limits as found in Special Condition No. 4. The permit holder must meet the quality assurance procedures required by 40 CFR Part 60 Appendix F or any alternate procedures specified in the AMP shown as Attachment I.

        (1) The SO_2 CEMS shall monitor and record the three hour arithmetic average (not weighted by production volume) SO_2 emission rate in units of pounds per ton of one hundred percent acid produced.

(2) The SO_2 CEMS shall monitor and record the SO_2 emission rate averaged (arithmetic average, not weighted by production) over all operation hours in each 365 day period in units of pounds per ton of one hundred percent acid produced.

(3) Implementation of the monitoring requirements has been defined in the AMP for the SO_2 CEMS system.

(4) The AMP supersedes the corresponding SO_2 monitoring requirements of NSPS Subpart H.

(5) All steps necessary to avoid CEMS breakdowns and minimize CEMS down time must be taken. This shall include, but is not limited to, operating and maintaining the CEMS in accordance with best practices and maintaining an on-site inventory of spare parts or other supplies necessary to make rapid repairs of the equipment.

(6) In the event of an CEMS downtime lasting longer than twenty-four hours, the permittee shall demonstrate compliance with the emission limits established in Special Condition No. 4 according to the procedures specified in the AMP shown as Attachment I.

AS and ABS Loading

14. Loading operations are limited to the liquids identified below at the rates indicated: **(08/20)**

Liquid	Gallons per Hour	Gallons/rolling 12 months
Ammonium Sulfite (AS)	21,000	8,410,000
Ammonium Bisulfite (ABS)	21,000	8,410,000

All loading shall be submerged and rolling 12-month rack throughput records shall be updated on a monthly basis for each product loaded.

15. All lines and connectors shall be visually inspected for any defects prior to hookup. Lines and connectors that are visibly damaged shall be removed from service. Operations shall cease immediately upon detection of any liquid leaking from the lines or connections. **(10/18)**

16. Loading emissions shall be vented to the spent acid scrubber (EPN EMSCRUBSTK). **(08/20)**

17. Each tank truck used for ABS loading shall be leak checked and certified annually in accordance with Title 40 Code of Federal Regulations Part 60 (40 CFR 60), Subpart XX.

The permit holder shall not allow a tank truck to be filled with ABS unless it has passed a leak-tight test within the past year as evidenced by a certificate which shows the date the tank truck last passed the leak-tight test required by this condition and the identification number of the tank truck. **(08/20)**

AS and ABS Storage Tanks (08/20)

18. Storage tank throughput and service shall be limited to the following:

Tank Identifier	Service	Fill/Withdrawal rate (gallons/hour)	Rolling 12 Month Throughput (gallons)
T-453A-D, T-454A	Ammonia Liquor (AS, ABS)	21,000	16,819,000

19. All vents from Tanks T-453A-D and T454A shall be routed to the spent acid scrubber (EPN EMSCRUBSTK).

20. Storage tanks must be equipped with permanent submerged fill pipes.

21. The permit holder shall maintain a record of total ammonia liquor throughput for the previous month and the past consecutive 12-month period for the tank group consisting of T-453A-D and T-454A

Fugitive Monitoring - Physical Inspections of Piping, Valves, Pumps, and Compressors in contact with SO_2 – 28PI

22. Except as may be provided for in the special conditions of this permit, the following requirements apply to the above-referenced equipment: **(10/18)**

    A. Construction of new and reworked piping, valves, pump systems, and compressor systems shall conform to applicable American National Standards Institute (ANSI), American Petroleum Institute (API), American Society of Mechanical Engineers (ASME), or equivalent codes.

    B. New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical.

    C. To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak-checking during plant operation. Non-accessible valves, as defined in 30 TAC Chapter 115, shall be identified in a list to be made available upon request.

    D. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter.

    E. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve. Except during sampling, the second valve shall be closed.

    F. All piping components shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through.

    G. Damaged or leaking valves, connectors, compressor seals, and pump seals found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. A leaking component shall be repaired as soon as practicable, but no later than 15 days after the leak is found. If the repair of a component would require a unit shutdown, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging.

At the discretion of the TCEQ Executive Director or designated representative, early unit shutdown or other appropriate action may be required based on the number and severity of tagged leaks awaiting shutdown.

H. Date and time of each inspection shall be noted in the operator's log or equivalent. Records shall be maintained at the plant site of all repairs and replacements made due to leaks. These records shall be made available to representatives of the TCEQ upon request.

I. This Special Condition does not apply to EPN FUGAMLV.

Piping, Valves, Pumps, and Compressors in contact with H_2S and NH_3– 28AVO

23. Except as may be provided for in the Special Conditions of this permit, the following requirements apply to the above-referenced equipment: **(10/18)**

A. Audio, olfactory, and visual checks for leaks within the operating area shall be made every eight hours.

B. Immediately, but no later than one hour upon detection of a leak, plant personnel shall take at least one of the following actions:

(1) Isolate the leak.

(2) Commence repair or replacement of the leaking component.

(3) Use a leak collection/containment system to prevent the leak until repair or replacement can be made if immediate repair is not possible.

C. Date and time of each inspection shall be noted in the operator's log or equivalent. Records shall be maintained at the plant site of all repairs and replacements made due to leaks. These records shall be made available to representatives of the TCEQ upon request.

D. This Special Condition does not apply to EPN FUGAMLV.

Compliance Assurance Monitoring

24. The following requirements apply to ammonia scrubber capture system for EPN 1.

A. If used to control pollutants like SO_2, the permit holder shall conduct a once a month visual, audible, and/or olfactory inspection of the capture system to verify there are no leaking components in the capture system.

B. The control device shall not have a bypass.

C. If any of the above inspections are not satisfactory, the permit holder shall promptly take necessary corrective action.

Scrubbers

25. The minimum liquid flow to the ammonia scrubber shall be 650 gpm. The circulation rate shall be monitored and recorded at least once a day. The liquid flow rate shall be recorded at least once an hour. The flow monitoring device shall be calibrated at a frequency in accordance with the manufacturer’s specifications, or at least annually, whichever is more frequent, and shall be accurate to within 2 percent of span or 5 percent of the design value.

The pH shall be analyzed and recorded at least once a day from the NH_3 scrubber. The minimum allowable pH in the NH_3 scrubber is 4.5. The pH monitoring device shall be cleaned with an automatic cleaning system or cleaned weekly using hydraulic, chemical or mechanical cleaning. The pH monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, or at least weekly, whichever is more frequent and shall be accurate to within 0.5 pH unit.

Quality assured (or valid) data must be generated when the H_2SO_4 production unit is operating except during the performance of a daily zero and span check. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in hours) that the H_2SO_4 production unit operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgement and the methods used recorded.

26. The spent acid scrubber (EPN EMSCRUBSTK) shall be operated in accordance with the following requirements: **(08/20)**

    A. The minimum liquid flow to the scrubber shall be at or above 5 gallons per minute, based on an hourly average, when waste gas is directed to the scrubber. The liquid flow rate shall be monitored and recorded at least once per minute. As an alternative, if the liquid pump horsepower (hp) draw is being monitored to demonstrate compliance with this special condition, the liquid pump horsepower draw shall be monitored and recorded at least once per minute, and the horsepower draw shall be at or above 1.0 hp, based on an hourly average.

    B. The horsepower monitoring device or liquid flow monitoring device, as applicable, shall be calibrated in accordance with the manufacturer's specifications at least annually.

    C. The caustic scrubber designated as EPN EMSCRUBSTK shall operate with a minimum pH of 8 on an hourly average. The scrubbing liquid shall be tested continuously (at least once per minute) to insure the pH is met. If the minimum pH is not met then the scrubbing liquid shall be replenished and/or replaced to meet the minimum pH. Testing records shall be kept at the plant site.

    D. Quality assured (or valid) data must be generated when the facility is operating. Loss of valid data due to periods of monitor breakdown, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in hours) that the facility operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.

27. The spent acid scrubber (EPN EMSCRUBSTK) shall operate with no less than 99.9 percent removal efficiency for SO_2 or reduce stack SO2 concentration to 10 ppmv or less, on an hourly average. **(08/20)**

Actual to Projected Actual (ATPA) Applicability Test

20. The AS project associated with the permit amendment application, PI-1 dated January 30, 2020, was determined not to be subject to a major source review by identifying projected actual emissions rates for

the facilities modified or potentially affected by the project. Actual emissions of SO_2 from the affected sources of NSR Permit No. 9565 (EPN 1) shall be monitored, recorded, and reports made in accordance with 30 TAC §116.127 for the time period specified in 30 TAC §116.127(b)(1). The projected actual rate for the source EPN 1 is 415.15 tpy. **(10/18)**

Date: August 14, 2020

Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 9565 and PSDTX695M3

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
EMSCRUBSTK	Spent Acid Scrubber - Scrubber Liquor Storage Tanks, AML Truck and Railcar Loading	SO_2	<0.01	<0.01
		NH_3	0.01	<0.01
AMLTLDGU	Uncaptured AML Truck Loading	SO_2	<0.01	<0.01
		NH_3	<0.01	<0.01
AMLRLDGU	Uncaptured AML Railcar Loading	SO_2	<0.01	<0.01
		NH_3	<0.01	<0.01
FUGAMLV	AMLV Fugitive Emissions	SO_2	<0.01	0.02
		NH_3	<0.01	<0.01
FUGAS	AS Fugitive Emissions	SO_2	0.01	0.05
		NH_3	0.04	0.17
		H_2SO_4	0.01	<0.01
FUGNH3	Ammonia Fugitive Emissions	NH_3	0.09	0.37
FUGAAG	Amine Acid Gas Fugitive Emissions	H_2S	0.06	0.13
		VOC	<0.01	<0.01
FUGPROC	Process Fugitive Emissions	SO_2	0.07	0.13
1	Ammonia (NH_3) Scrubber	SO_2 (6)	114.13	441.65
		VOC	0.01	0.01
		NO_x	19.75	54.91
		CO	5.50	24.09
		PM	3.19	11.32
		PM_{10}	3.19	11.32

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
		$PM_{2.5}$	3.19	11.32
		H_2SO_4 (6)	6.88	10.04
		NH_3	0.40	1.70
		Cl_2	0.01	0.02
		HCl	0.06	0.26
		Ag	0.03	0.12
		As	0.13	0.52
		Ba	0.03	0.12
		Be	0.02	0.08
		Cd	0.02	0.08
		Cr	0.67	2.82
		Hg	0.0018	0.0041
		Ni	0.56	2.42
		Pb	0.06	0.24
		Sb	0.03	0.12
		Se	0.05	0.20
		Tl	0.02	0.08
RACKFUG	Rack Process Fugitives (5)	VOC	0.01	0.01
		H_2S	0.01	0.01
FUGRC	Railcar Piping and Components (5)	VOC	0.01	0.02
		H_2SO_4 (6)	0.01	0.01

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
H_2SO_4 - sulfuric acid mist
NO_x - total oxides of nitrogen

Emission Sources - Maximum Allowable Emission Rates

SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM10 and PM2.5, as represented
PM_{10} - particulate matter (PM) equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no PM greater than 10 microns is emitted.
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
NH_3 - ammonia
Ag - silver
As - arsenic
Ba - barium
Be - beryllium
Cd - cadmium
Cr - chromium
Cl_2 - chlorine
HCl - hydrogen chloride
Hg - mercury
Ni - nickel
Pb - lead
Sb - antimony
Se - selenium
TI - thallium
H_2S - hydrogen sulfide

(4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
(6) Prevention of Significant Deterioration pollutant.

Date: August 14, 2020